

**Lesson preparation book**

# **Information & Communication Technology**



**Fifth grade primary  
First semester**

**Prepared and designed by: Mahmoud Yassin El Shafei**





## Lesson(1)

### Explorer in action

**Strategy**

**Problem Solving**

**Critical thinking**

Date

Class

per

#### Lesson objectives

By the end of this lesson the student will be able to:

- **Give** examples of how information is shared.
- **Identify** methods for recording information.
- **Communicate** and share information with his colleagues through educational platforms.

#### "Preface"

**What challenges do you face when making a virtual call over the Internet?**

#### Accompanying activities

Take the students to the computer room and ask them the introductory question and discuss the answers with them and show them the video (The Search for the Lost Palace) and through it we deduce the tools that Fred Hebert uses to communicate and share information with his students.

#### View Lesson

**Tools used by (Fred Hebert) in his daily work:**

- word processor in writing reports.
- Spreadsheet program (Excel) in graphs and their expression.
- Presentation Program (PowerPoint)
- E-mail to communicate officially
- (whatsapp - zoom) programs for making virtual meetings.

**Evaluation:**

**For official communication, Fred Hebert uses .....**





## Lesson( 2 )

# Computer peripherals

**Strategy**

**Problem Solving**

**Critical thinking**

Date

Class

per

### Lesson objectives

By the end of this lesson the student will be able to:

- **Explain** the basic concepts of tools attached to the computer.
- **Describe** common computer problems.
- **Explain** how to solve some common computer problems.

"Preface"

What challenges do you face when making a virtual call over the Internet?

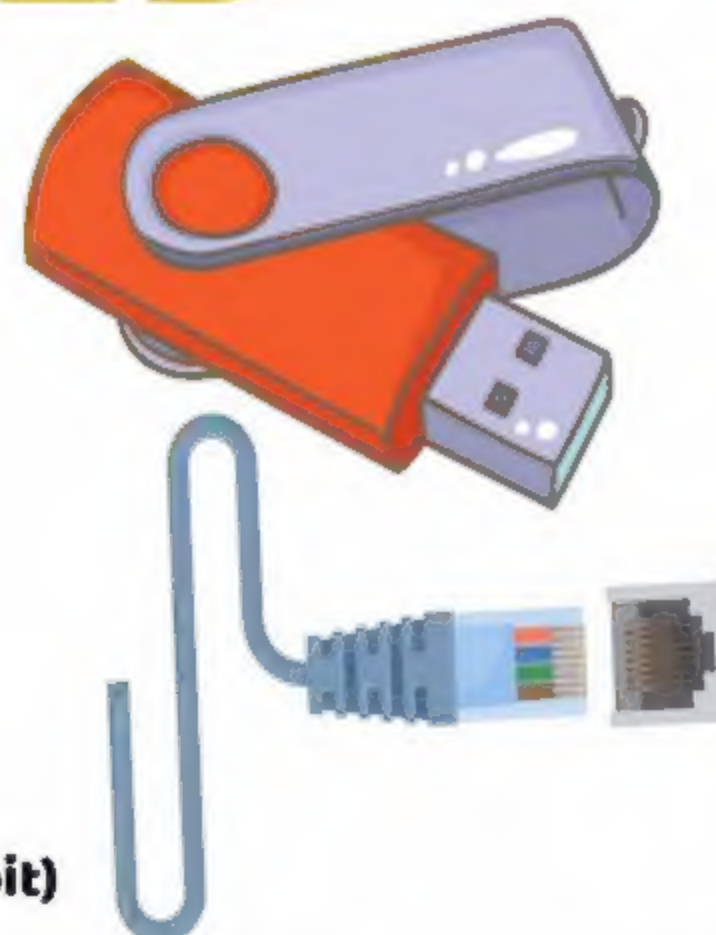
### Accompanying activities

Take the students to the computer room and ask them the introductory question and discuss the answers and show them the basic peripherals of the computer with some common problems and ways to solve them through a presentation.

### View Lesson

**PC peripherals:**

- Flash Memory Flash Memory.
- Ethernet Cable.
- Ethernet port.
- Router.
- External Hard drive.
- High Definition Multimedia Interface (HDMI).



**Measuring of Storage units :**

(terabyte - gigabyte - megabyte - kilobyte - byte - bit)

**The measurement unit for communication speed:** megabytes per second, Mbps.

**Processor speed unit:** GHz.

**Common computer problems see the book**

**Evaluation:** The processor speed is measured by the .....





# Lesson ( 3 )

## Networks

**strategy**

**Critical thinking**

**Cooperative Education**

Date

Class

per

### Lesson objectives

By the end of this lesson the student will be able to:

- **Explain** the nature of the network.
- **Describe** the different types of networks.
- **Explain** the evolution of communications in the computer so far.

**"Preface"**

**What does the word network mean to you?**

### Accompanying activities

Take the students to the computer room and ask them the introductory question and discuss the answers with them. I make a presentation explaining the concept of the Internet and networks and their types, discussing these types and their common characteristics, and linking the topic to their daily lives.

### View Lesson

**Internet :**

It is a network that connects computers and people who use that network from all over the world. To connect the computer to it, you need a gateway (router) (and an ISP provider).

**World Wide Web WWW:** It is an acronym (WORLD WIDE WEB), which is part of the Internet and consists of web pages that can be navigated between them.

**Intranet:**

A private network limited to a group of people that connects them together, such as a school network.

**closed network:**

It is closed as in the computer lab at the school by connecting with cables while allowing file sharing.

**Evaluation:** WWW is an abbreviation for .....





## Lesson (4)

# Digital communication tools

### Strategy

Critical thinking

Dialogue and discussion

Date

Class

per

### Lesson objectives

By the end of this lesson the student will be able to:

- **Describe** the different ways in which computer networks can be used to communicate.
- **Explain** basic scientific concepts related to ICT tools.
- **Explain** how computer networks can help us in our daily lives.

### "Preface"

What is the difference between face-to-face communication and virtual communication?

### Accompanying activities

Take the students to the computer room, ask them the introductory question, discuss the answers, and make a presentation explaining the concept of the Internet of Things, Bluetooth technology, and the role of networks in the lives of people with disabilities.

### View Lesson

#### The Internet of things :

Consists of devices connected to the Internet via WiFi, which you can control remotely. Such as Bluetooth speakers and digital home appliances (refrigerator - washing machine) through a specialized application.

#### Bluetooth:

A network technology that connects wireless devices over a short range to form a network for transmitting data between different devices.

#### Advantages of using networks for people with disabilities:

- Bluetooth speakers.
- Screen readers for audio feedback.



**Evaluation:** Mention a home appliance that can be connected to the internet?